ABSTRACT

A method for inoculating molten iron. The method comprises passing the molten iron through a filter assembly at an approach velocity of about 1 to about 60 cm/sec. The filter assembly comprises a filter element and an inoculation pellet in contact with the filter element. The pellet has an inoculant dissolution rate of at least 1 mg/sec. to no more than 320 mg/sec. and comprises about 40-99.9%, by weight, carrier comprising ferrosilicon. The pellet further comprises about 0.1-60%, by weight, at least one inoculating agent selected from a group consisting of cerium, strontium, zirconium, calcium, manganese, barium, bismuth, magnesium, titanium and aluminum or from rare earths.